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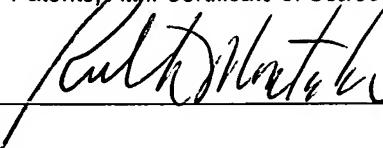
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Docket No.: GK-ZEI-3254/500343.20274

Patentee(s): Dietrich SCHWEITZER, et al.

Patent No.: 7,333,842

Serial No.: 10/511,483

Issued: February 19, 2008

Filed: September 7, 2005

For: METHOD FOR THE SPECTROSCOPIC DETERMINATION OF THE OXYGEN SATURATION OF BLOOD IN THE PRESENCE OF OPTICAL DISTURBANCE VARIABLES

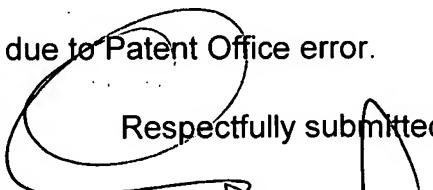
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UNDER 37 CFR 1.322

Sir:

Upon review of U.S. Patent No. 7,333,842 issued February 19, 2008, it is noted that the assignees name is incorrect. Enclosed is a copy of the completed PTOL-85b as filed with the correct name, the copy was obtained from private PAIR system and the cover page of the Letter Patent.

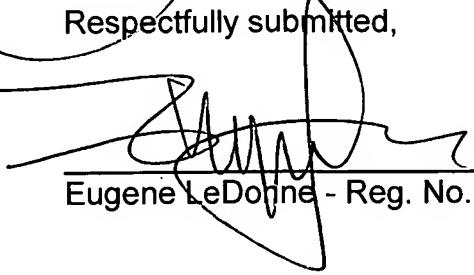
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Respectfully submitted,

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Enclosures:

PTO-1050 in duplicate
Copies of PTOL-85B & 1st pg of LP

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UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

Page 1 of 1

Patent No.: **7,333,842**

Application No.: **10/511,483**

Issue Date: **February 19, 2008**

Inventor(s): **Dietrich SCHWEITZER, et al.**

It is certified that this error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

TITLE PAGE

The assignee's name should read as follows:

[73] Carl Zeiss Meditec AG, Jena (DE)

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Patent No. **7,330,842**

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UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

Page 1 of 1

Patent No.: **7,333,842**

Application No.: **10/511,483**

Issue Date: **February 19, 2008**

Inventor(s): **Dietrich SCHWEITZER, et al.**

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Patent No. **7,330,842**

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December 20, 2007	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,483	09/07/2005	Dietrich Schweitzer	GK-ZEI-3254/500343.20274	4431

TITLE OF INVENTION: METHOD FOR THE SPECTROSCOPIC DETERMINATION OF THE OXYGEN SATURATION OF BLOOD IN THE PRESENCE OF OPTICAL DISTURBANCE VARIABLES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	12/21/2007
EXAMINER		ART UNIT	CLASS-SUBCLASS	12/26/2007 EHAILE2 00000003 10511483		
WINAKUR, ERIC FRANK		3768	600-336000	01 FC:1501	1440.00 0P	
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(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Carl Zeiss Meditec AG

Jena, Germany

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

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(12) **United States Patent**
Schweitzer et al.

(10) **Patent No.:** US 7,333,842 B2
(45) **Date of Patent:** Feb. 19, 2008

(54) **METHOD FOR THE SPECTROSCOPIC DETERMINATION OF THE OXYGEN SATURATION OF BLOOD IN THE PRESENCE OF OPTICAL DISTURBANCE VARIABLES**

(75) **Inventors:** Dietrich Schweitzer, Neustadt/Orla (DE); Martin Hammer, Jena (DE); Eike Thamm, Jena/Maua (DE)

(73) **Assignee:** Carl Ziess Mesitec AG, Jena (DE)

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 318 days.

(21) **Appl. No.:** 10/511,483

(22) **PCT Filed:** Apr. 17, 2003

(86) **PCT No.:** PCT/EP03/04024

§ 371 (c)(1),
(2), (4) Date: Sep. 7, 2005

(87) **PCT Pub. No.:** WO03/086193

PCT Pub. Date: Oct. 23, 2003

(65) **Prior Publication Data**

US 2006/0063994 A1 Mar. 23, 2006

(30) **Foreign Application Priority Data**

Apr. 17, 2002 (DE) 102 17 543

(51) **Int. Cl.**
A61B 5/00 (2006.01)

(52) **U.S. Cl.** 600/336; 600/323

(58) **Field of Classification Search** 600/310,
600/322, 323, 336

See application file for complete search history.

(56) **References Cited**

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Primary Examiner—Eric F Winakur

(74) **Attorney, Agent, or Firm**—Reed Smith, LLP

(57) **ABSTRACT**

The invention is directed to a method for the spectrometric determination of the oxygen saturation of blood in the presence of optical disturbance variables in which transmission measurements and reflection measurements are carried out in at least two wavelengths that are isosbestic for hemoglobin and oxyhemoglobin, and at least one other wavelength at which the extinction of hemoglobin and oxyhemoglobin differ. Corresponding auxiliary functions are defined in the measurement spectrum (M) and in the reference spectra of hemoglobin and oxyhemoglobin, at least two of the measurement values or two of the reference values for the isosbestic wavelengths lying on this auxiliary function. A corrected measurement spectrum (M'') is generated by the two auxiliary functions. The oxygen saturation is determined by comparing the changed data of this corrected measurement spectrum (M'') with the data of the reference spectra at the other wavelength.

3 Claims, 2 Drawing Sheets

